

### **REMARKS**

Claims 1-6, 8-22, 24-30 stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent 5,083,293 to Gilbert et al., and further in view of U.S. Patent 5,892,906 to Chou et al. This rejection is respectfully traversed.

Chou discourages personal computer (PC) theft by requiring a password be supplied to the computer before the BIOS routines can be completely executed. The BIOS is stored in an EEPROM 15, which by definition, is electrically erasable/re-writable. A security function 25 part of the BIOS is shown in Figure 3. Unless the BIOS routine is completely executed, the computer operating system can not accessed, thereby rendering the computer inoperative. The BIOS stores a computer ID and a public decryption key. Shown in Figure 2 is a physical by separate "key," which includes the same information in a ROM 19. A CMOS RAM 17 in the computer includes a memory location 30, which when empty, represents a locked state for the computer. Once the computer is an unlocked mode, the memory location 30 of RAM 17 is written with a non-zero unlocking code. In the unlocked mode, the BIOS security function 25 is completely bypassed as shown in step 46 of Figure 5 and as explained in column 4, lines 61-63 and column 6, lines 12-19.

Regarding claim 1, the Examiner contends that Chou discloses a CPU 14 that executes the security program 25 located in the BIOS memory corresponding to the EEPROM 15. The BIOS routine is not stored, as the Examiner subsequently contends, in the ROM 19 key, which is physically separate from and attachable to the computer, as

shown in Figure 2. Separate and detached ROM 19 does not include the BIOS routine but only includes information which, when the key is attached to the computer, permits the BIOS routine to complete execution. See column 3, lines 41-43.

Chou fails to disclose that the security program routine 25 stored in the EEPROM 15 is necessarily executed upon start-up of the computer. To the contrary, the security routine 25 can be entirely "skipped," as described in column 6, lines 14-19, repeated here for convenience:

In this event [the unlocked state], each time the computer attempts a boot-up sequence, memory location 30 will be checked in step 43 and if it contains the unlock code, decision block 44 will direct execution to execute the boot code in step 53, skipping the security function.

Thus, Chou fails to teach a processor arranged to "necessarily execute a security program routine stored in said protected part of said memory upon start-up," as recited in claim 1.

As admitted by the Examiner, Chou also fails to disclose that the same memory includes a "protected part from which data can be read but which is protected against being written into" so that "after data is initially stored in said part, any subsequent writing of data into said protected part is irreversibly blocked." For this admitted deficiency, the Examiner relies upon Gilberg. Gilberg describes preventing data alteration using a fuse element 56.

The Examiner contends that data stored in secure memory M is prevented from being altered by:

applying an 'erase' signal to the erase terminal [66] to erase the contents of erasable memory [52] once data is stored in

secured memory [M, fig. 1-2] thereby prevent alteration of the secured data stored in the secured part of memory.

Notwithstanding the Examiner's contention, Gilberg—like Chou—fails to disclose a processor arranged to "necessarily execute a security program routine stored in said protected part of said memory upon start-up." Thus, even if Chou and Gilberg could be combined, (for purposes of argument only), their combination still fails to disclose this claim feature.

In addition, Applicants respectfully submit that the combination of Chou and Gilberg is illegally improper. There must be a proper motivation to modify the teachings of Chou with those of Gilberg as proposed by the Examiner. That general motivational test asks "whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." See *In re Beatti*, 974 F.2d 1309, 1311-12 (Fed. Cir. 1992). The rationale advanced by the Examiner for combining these two references ignores their two, very different purposes. Chou deals with security against theft of a laptop computer. Gilberg tries to prevent data alteration, which is entirely different from providing security against theft. Chou is not concerned about data alteration, but rather wants to discourage personal computer theft by making use of a stolen PC difficult for the thief. In direct opposition to Gilberg, Chou is perfectly content to allow alteration of data in the secure memory in the unlocked mode.

The Examiner is reminded that:

rejecting a patent solely by finding prior art corollaries for the claimed element would permit an Examiner to use the claimed invention itself as a blueprint for piecing together

elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability.'

See *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570 (Fed. Cir. 1996). To prevent the use of hindsight, the Federal Circuit requires that "the Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998). Because Chou and Gilberg are directed to entirely different problems, this basic requirement for combining references has not been satisfied. Indeed, the Examiner must resort to parroting advantageous features of claim 1: (1) necessarily executing a security routine coupled with (2) storing the security routine in a location that irreversibly cannot be written into. The Examiner's stated "motivation" does not come from prior art, but rather improperly comes from Applicants' own claims.

Accordingly, Applicants submit that the present application is in condition for allowance. An early notice to that effect is earnestly solicited.

MÖLLER et al.

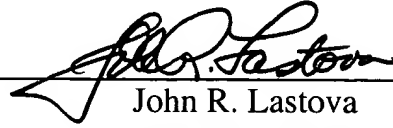
Appl. No. 09/598,173

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Respectfully submitted,

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By:

A handwritten signature in black ink, appearing to read "John R. Lastova", is written over a horizontal line.

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